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EXAMINER

CIRIC, LJILJANA V

ART UNIT PAPER NUMBER

3753

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,670

Applicant(s)

PETERSEN ET AL.

Examiner

Ljiljana (Lil) V. Ciric

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-22 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the reply filed on March 16, 2004.
2. Claims 1, 3, and 5 through 22 remain in the application. Of these, claims 1, 3, and 5 through 22 are as amended, and claim 22 is new.
3. Upon reconsideration in view of the amendments to the claims and in view of the prosecution history as a whole, the previously indicated allowability of claims 4 through 21 is hereby withdrawn. Newly made prior art rejections of these claims follow.

Response to Arguments

4. Applicant's arguments filed on March 16, 2004 have been fully considered but they are not persuasive.

As a preface to the following traversal of applicant's arguments, the examiner hereby notes that the claims in a pending application should be given their *broadest* reasonable interpretation. See In re Pearson, 181 USPQ 641 (CCPA 1974).

For example, applicant notes that the previous Office action "indicated that claims 4-7, 10 and 17-19 contain allowable subject matter if rewritten to include all of the limitations of the base claim and any intervening claims" and that, in view of this, "applicants have recast claim 4 as new independent claim 22", which is presumably why claim 22 "should be allowable". However, applicants' "recast" of claim 4 as new independent claim 22 is NOT of the same scope as previously examined claim 4 nor of previously examined claim 4 rewritten to include all of the limitations of the base claim and any intervening claims. Thus, absent any other arguments specifically pointing out to how the language of new claim 22 patentably distinguishes new claim 22 from the applicable prior art of record, applicant's conclusion that new claim 22 "should be allowable" is NOT persuasive.

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Applicant further notes that "applicants have amended claim 1 to further clarify the distinctions between the subject matter thereof and Mathur et al.", thereupon summarily concluding that "claim 1, as well as dependent claim 3, are now allowable."

Nevertheless, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments also do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Election/Restrictions

5. In order to clarify the record with regard to the restriction requirement made via Paper No. 8, mailed on September 10, 2003, it is hereby noted that, based on applicant's response to the abovementioned restriction requirement, claims 5, 11, 14, and 17 should have been withdrawn from further consideration in addition to claim 2, now cancelled. Since claims 5, 11, 14, and 17 have inadvertently not been withdrawn from consideration to date, the abovementioned restriction requirement is hereby withdrawn. In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that any claim(s) presented in a continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Priority

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6. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

The certified copy has been filed in parent Application No. PCT/DK00/00319, filed on June 14, 2000.

Drawings

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the coupling element of the gasket "*comprising two outwardly protruding flaps that are configured for engaging with the two mutually most distant openings provided at each their tongue-like portion*" [sic] and a corresponding superjacent pressure element as recited in claims 7 and 13, respectively, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

8. The abstract of the disclosure is objected to because it does not avoid the phraseology and form often used in patent claims (i.e., "comprising"), and also because it contains grammatical and/or idiomatic informalities (i.e., "there is...provided at least two openings" should be "there are...provided at least two openings"). Correction is required. See MPEP § 608.01(b).

Claim Objections

9. Claims 1, 3, and 5 through 22 are objected to because of the following informalities, for example: "there is" [claim 1, line 6] should be deleted for improved readability and grammatical correctness; immediately preceding "provided" [claim 1, line 7], "there are" should be inserted for improved readability and grammatical correctness; "that" [claim 5, line 2; claim 6, line 3; claim 7, line 3] should be deleted and replaced with "wherein" or similar for improved readability and grammatical correctness; "the coupling elements" [claim 9, line 2] should be deleted and replaced with "the coupling element" for improved readability and proper antecedent basis (consistent with the amendment to claim 8, for

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example); and, "include" [claim 22, line 6] should be replaced with "includes" for improved grammatical correctness. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 1 and 3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. For example, claim 1 as amended newly recites the at least one ridged, tongue-like portion as "extending outwardly from the gasket groove" whereas the originally filed disclosure, including the originally filed specification and drawings, fail to show or describe the at least one ridged, tongue-like portion 9 or 29 as extending *outwardly* from the gasket groove. The originally filed drawings, for example, might be described as, for example, showing the at least one ridged, tongue-like portion 9 or 29 as extending upwardly from the gasket groove, or towards the center of the gasket groove, or inwardly from the gasket groove towards the center of the plate, or outwardly from the plate towards the gasket groove, but *not* as extending outwardly from the gasket groove. Thus, the aforementioned limitation represents new matter in claims 1 and 3 as amended.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1, 3, and 5 through 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Upon reconsideration, the limitation "said expanded portion being situated substantially in the same place as the gasket groove itself" [claim 1, lines 4-5; claim 22, lines 5-6] contains idiomatic informalities and is thus not particularly clear as written.

Also, upon reconsideration, with regard to claim 1 as written, it is not clear to which previously recited element the term "this" in line 12 refers, thus rendering indefinite the metes and bounds of protection sought by claim 1 and by claim 3 depending therefrom. Recommend replacing the term "this" with a direct recitation of whichever element is referred to thereby.

Also with regard to claim 1 as written, it is noted that it is furthermore not clear whether the limitation of "at least one ridged, tongue-like portion extending outwardly from the gasket groove" refers to a gasket element or to a plate element or to either, thus at least rendering the metes and bounds of protection sought by the claim very broad, if not indefinite per se. This comment applies to claim 22 as well.

The term "tongue-like" appearing in the claims is interpreted as being synonymous with "tongue-shaped" for examination purposes, and is thus not considered to render the claims indefinite per se.

With regard to claim 3 as written, it is not clear whether the limitation reciting "two ridged, tongue-like portions" is intended to mean that the at least one ridged, tongue-like portion as previously recited in claim 1 from which claim 3 depends comprises two ridged, tongue-like portions or to mean that there are two ridged, tongue-like portions in addition to the at least one ridged, tongue-like portion as previously recited in claim 1, thus rendering indefinite the intended scope of protection sought by claim 3.

Claims 5 through 7 and all claims depending therefrom are similarly rendered indefinite because it is not clear whether the "one ridged, tongue-like portion" as recited in claim 5 and the "two ridged, tongue-like portions" as recited in each of claims 6 and 7 are the same as or in addition to the "at least one ridged, tongue-like portion" as recited in claim 22 from which claims 5 through 7 depend.

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Furthermore, it is not clear whether the limitations relating to the coupling element of the gasket comprising one or two protruding flaps as also recited in each of claims 5 through 7 is a double recitation of the same as already recited in claim 22 from which each of these claims depends or whether the corresponding limitations in claims 5 through 7 are an attempt to positively recite the coupling element of the gasket along with the flap(s) thereof since the same are only referred to as part of an intended use limitation in base claim 22. In general, the limitations following "that" in each of claims 5 through 7 are not particularly clear as written. For example, there is no clear antecedent basis for either the limitation "the two central and mutually facing openings provided at each their [sic] tongue-like portion" or the limitation "the two mutually most distant openings provided at each their [sic] tongue-like portion", thus further rendering indefinite the intended scope of each of claims 6 and 7 and all claims depending therefrom.

The term "considerably" in each of claims 9 and 14 through 16 is a relative term which renders the claim indefinite. The term "considerably" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, as used to qualify the extent to which the flaps on the coupling element of the gasket extend into the openings, this term renders the same indeterminate and the corresponding claims indefinite.

Similarly, the term "relatively close" in claim 22 is a relative term which renders the claim indefinite. The term "relatively close" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, as used to qualify the extent to which the indentation of the gasket groove extends relative to the periphery of the plate, this term renders the same indeterminate and the claim 22 and all claims depending therefrom indefinite.

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Also, the limitations following "wherein" in lines 9-11 of claim 22 appear to have one or more words missing therefrom [i.e., "in the expanded portion *includes* at least one..."] and are thus generally incomprehensible as written, thus rendering indefinite the intended scope of protection sought by claim 22 and all claims depending therefrom.

The above is an indicative, but not necessarily an exhaustive, list of 35 U.S.C. 112, second paragraph, problems. Applicant is therefore advised to carefully review all of the claims for additional problems. Correction is required of all of the 35 U.S.C. 112, second paragraph problems, whether or not these were particularly pointed out above.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. As best can be understood in view of the indefiniteness of the claims, claims 1, 3, and 5 through 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Mathur et al. ('758, of record).

Mathur et al. [especially Figures 1 through 3 and 7 through 10] discloses a heat exchanger plate 6 essentially as claimed, including, for example: a gasket groove 7 that extends close to the periphery or edge 9 of the plate 6 and that is provided at intervals with expanded portions 12 for receiving corresponding coupling elements or tabs 3 of an associated gasket 1; at least two openings 24 and 25 substantially perpendicular to the longitudinal direction of the gasket groove 7 at each side of a series of ridged, tongue-like portions each comprising downwardly depressed portions 15 and corresponding sub-grooves 14 [i.e., see column 2, lines 50-68] extending outwardly from the gasket groove 7 towards the periphery or edge 9 of the plate [i.e., see Figures 7 and 8]; and, two protruding "flaps" such as dovetailed

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sides 260 and 270 or such as nubs 30 on a coupling element or tab 3 of the gasket 1 configured for engaging with a set of corresponding openings 24 and 25.

The reference thus reads on the claims.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925. While she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric may generally be reached at the Office during the work week between the hours of 10 a.m. and 6 p.m. ET.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel, can be reached on (703) 308-1272.

The NEW central official fax phone number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

June 10, 2004


LJILJANA V. CIRIC
PRIMARY EXAMINER
ART UNIT 3753